

APPLICATION FOR PERMIT TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office..... DEC 23 1987

Returned to applicant for correction.....

Corrected application filed.....

Map filed..... JAN 26 1988 under 51267

The applicant..... Sierra Shadows, A Joint Venture

1050 E. William, Suite 405A Carson City,

Street and No. or P.O. Box No., of City or Town

Nevada 89701, hereby make.... application for permission to appropriate the public

State and Zip Code No.

waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) Glenbrook Properties is the managing partner and is a Nevada corporation first incorporated on August 6, 1976 in Douglas County, Nevada.

1. The source of the proposed appropriation is..... Underground
Name of stream, lake, spring, underground or other source

2. The amount of water applied for is..... .3 CFS (16.02 MG/yr) See Attachment 1. second-feet
One second-foot equals 448.83 gals. per min.

(a) If stored in reservoir give number of acre-feet.....

3. The water to be used for..... Quasi-Municipal purposes
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.

4. If use is for:

(a) Irrigation, state number of acres to be irrigated.....

(b) Stockwater, state number and kinds of animals to be watered.....

(c) Other use (describe fully under "No. 12. Remarks")..... See Remarks and Attachment 1.

(d) Power:

(1) Horsepower developed.....

(2) Point of return of water to stream.....

5. The water is to be diverted from its source at the following point..... SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 10, T13N, R19E,
Describe as being within a 40-acre subdivision of public

MDM at a point from which the Northwest corner of Section 10 bears N5 $^{\circ}$ 11'20"W a
survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.

distance of 2515.32 feet, an existing well designated as "Sierra Shadows Well No. 1"

6. Place of use..... Portions of the SE $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 9, T13N, R19E, MDM and
Describe by legal subdivision. If on unsurveyed land, it should be so stated.

portions of the SW $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 10, T13N, R19E, MDM, T13N, R19E; a
total of approximately 23.0 acres consisting of the Sierra Shadows Subdivision, as
shown on the official Plat thereof, recorded as instrument No. 45011, Douglas County
Records. Also see Attachment 1.

7. Use will begin about..... January 1 and end about..... December 31 of each year.
Month and Day Month and Day

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Existing well with pump to 60,000 gallon tank
State manner in which water is to be diverted, i.e. diversion structure, ditches and
distribution reservoir through Subdivision water distribution system to existing
flumes, drilled well with pump and motor, etc. lots.

9. Estimated cost of works..... No additional improvements are required.

10. Estimated time required to construct works..... All improvements exist.
If well completed, describe works.

11. Estimated time required to complete the application of water to beneficial use..... 2 years

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

This Application is intended to provide for appropriation of water which will
be combined in use with water previously appropriated and other water applied
for concurrently under a separate Application. See Attachment 2.

Compared..... pm/se
Protested..... 4-4-88 by TCID
By..... s/Shelly N. Turner
1050 E. William, Suite 405A
Carson City, NV 89701

.....OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed.....cubic feet per second.....

Work must be prosecuted with reasonable diligence and be completed on or before.....

Proof of completion of work shall be filed on or before.....

Application of water to beneficial use shall be made on or before.....

Proof of the application of water to beneficial use shall be filed on or before.....

Map in support of proof of beneficial use shall be filed on or before.....

Completion of work filed..... IN TESTIMONY WHEREOF, I.....

Proof of beneficial use filed..... State Engineer of Nevada, have hereunto set my hand and the seal of my

Cultural map filed..... office, this.....day of.....

Certificate No.....Issued..... A.D. 19.....

State Engineer

ATTACHMENT 1

Water Use Projection.

Water will be used to provide for quasi-municipal needs of the Sierra Shadows Subdivision at Genoa, Douglas County, Nevada. Sierra Shadows Subdivision was recorded in Douglas County on June 30, 1980. Adequacy of water quantity to serve the Subdivision was approved in a certificate on the official plat signed by William J. Newman on May 6, 1980 as a representative of the Division of Water Resources. Tentative subdivision map approval as to water quantity had been provided in a letter from the Division of Water Resources addressed to the Douglas County Planning Commission dated September 17, 1979 and signed by Robert W. Pennington, Hydraulic Engineer.

The Sierra Shadows Subdivision consists of 26 single family, rural estates lots; one lot containing a duplex residence (two separate occupancies), one lot containing a commercial restaurant and bar operation, one lot containing three tennis courts and a separate common use parcel approximately .229 acres in size.

In addition to quasi-municipal service within the Subdivision, water is supplied to four fire hydrants located outside the Subdivision. Water is provided to the four fire hydrants to enhance fire protection within the town of Genoa. Water is used through the four fire hydrants only for suppression of fires, training of fire fighting personnel and testing of the hydrants and is estimated to occur for only about 2 hours each year.

Table A contains a projection of water use for Sierra Shadows Subdivision and the four additional fire hydrants.

TABLE A
SIERRA SHADOWS SUBDIVISION
PROJECTED WATER USE

<u>Development Feature</u>	<u>Duty MG/yr</u>	<u>Projected Use, MG/yr</u>
26 Rural Estate Lots (Note 1)	.483 per lot	12.56
Duplex Lot (Note 2)	.665 per lot	.67
Restaurant and Bar	See Note 3	1.44
Common Area Landscaping	See Note 4	1.11
Four Fire Hydrants (Note 5)	.060 per hydrant	<u>.24</u>
Total Water Use		16.02

(Continued, Notes on page 2.)

Notes for Table A:

- (1) Water use for single family lots is estimated as follows:

Residential Use Inside	500 GPD
Landscaping Irrigation, 10,000 SF/Lot	
@ 4.0 AcFt/yr = .92 Ac Ft/yr (.30 MG/yr)	822 GPD
	<u>1322 GPD</u>
	(.483 MG/yr)

Estimate is based on average use for the year.

- (2) Water use for the duplex lot is estimated as follows:

Residential Use, Inside (2x500 GPD)	1000 GPD
Landscaping Irrigation, 10,000 SF @	
4.0 Ac Ft/yr	822 GPD
	<u>1822 GPD</u>
	(.665 MG/yr)

Estimate is based on average use for the year.

- (3) Water use for the restaurant is estimated as 15 gallons per day per weighted fixture unit plus irrigation of exterior landscaping at 4 acre feet per year.

<u>Fixture</u>	<u>Weighted Fixture Unit</u>
Sink - Commercial bar	12
Sink - Commercial, with Dishwasher and Disposer	36
2 Lavatories, Public Use	12
Urinal, Public Use	12
2 Water Closets, Public Use	<u>72</u>
	144

Water use, $144 \times 15 \text{ gpd} = 2,160 \text{ gpd}$, .788 MG/yr

Landscaping:

.5 acres @ 4.0 acre feet/yr,
2.0 acre feet or .652 MG/yr.

Total Use, .788 MG/yr + .652 MG/yr = 1.44 MG/yr

- (4) Common use landscaping on the .229 acre parcel and a portion of the tennis court lot, a total of approximately .85 acres. Water use at 4.0 acre feet/yr. totals 3.40 acre feet/yr (1.108 MG/yr).

- (5) Fire hydrant use is estimated as 500 gpm per fire hydrant for 2 hours per year.

ATTACHMENT 2

Existing and Proposed Water Appropriations.

At the time of initial review and approval of Sierra Shadows Subdivision, three appropriations of ground water were applied to quasi-municipal use within the Subdivision as follows:

Permit No. 42383 - Amount of water appropriated, .11 CFS (6.123 MG/yr); to be diverted from Well No. 2;
Permit No. 42384 - Amount of water appropriated, .5 CFS (1.825 MG/yr) to be diverted from Well No. 1;
Permit No. 42385 - Amount of water appropriated, .5 CFS (1.825 MG/yr) to be diverted from Well No. 1.

Appropriations for Permits No. 42384 and 42385 were combined so that total appropriation for the two wells (three permits) was 7.948 MG/yr. In addition, decreed surface water rights from Genoa Creek were available to supplement ground water. The decreed surface water was to be used for irrigation of landscaping on some of the lots and was used through a separate irrigation system. Use of the surface water from Genoa Creek has been difficult because the water supply is intermittent and, at times, unavailable.

Two applications for appropriation of ground water have been initiated in order to provide sufficient diversion to accomodate total water demand of the Sierra Shadows Subdivision, including landscape irrigation. One of the applications provides for diversion of ground water from Sierra Shadows Well No. 1 and the other application provides for diversion from Sierra Shadows Well No. 2.

Each of the applications requests appropriation of 16.02 MG/yr with a maximum pumping rate of .3 CFS (134.6 GPM). It is estimated that 16.02 MG/yr will provide all of the water needed at the Sierra Shadows Subdivision, as indicated in Attachment 1. It is intended that the two new appropriations be combined together and with appropriations provided under Permits 42383, 42384 and 42385 so that maximum diversion from both wells will not exceed 16.02 MG/yr and that the total appropriation may be diverted from either well or from the two wells.

The decreed surface water right from Genoa Creek will remain appurtenant to the Sierra Shadows Subdivision for irrigation use as necessary.